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THE HISTORICAL BASES OF PHYSIOCRACY:
AN ANALYSIS OF THE
TABLEAU ECONOMIQUE

DAVID GLEICHER

MARXIST HISTORIANS of economic thought, especially those in the English tradition, have tended to view the school of French Physiocrats simply as early representatives of the Classical school of political economy which came of age in the capitalist societies of the eighteenth and nineteenth centuries. The Physiocrats' central conception of wealth as the "net product of the land," comprised solely of direct means of subsistence in the form of agricultural goods, is generally understood to be formally, but not substantially, different from the conception of the "surplus product" identified with the Classical school. The foremost Marxist authority on the Physiocrats, the English economist Meek, goes so far as to take the position that "Physiocracy and the type of theory propounded by Smith and his followers are best regarded . . . as two different species of the genus Classicism."¹ Along these same lines, Meek remarks earlier in the passage that "Both Quesnay and Smith . . . and the school which they represent were primarily concerned with the scientific analysis of *capitalist production*" (Meek's emphasis).

While these observations are not entirely devoid of truth, I would suggest that they fall prey to the criticism voiced by the historian Fox-Genovese in her recent work, *The Origins of Physiocracy*. She comments, "Historians of physiocracy have agreed almost unanimously on the bourgeois or capitalist character of the

1 R. Meek, "Physiocracy and Classicism in Britain," *Economic Journal*, No. 241 (1951), 28. It is highly doubtful that Meek's view conforms to that of Marx, who cites Petty in England and Boisguillebert in France as early representatives of Classical thought, but does not cite Quesnay. See *A Contribution to the Critique of Political Economy* (New York, 1970), pp. 54–55, and *Capital*, Vol. I (New York, 1967), pp. 80–81. The reason is that it is the theory of value and not the conception of wealth which Marx sees as significant in the identification.

doctrine. But the importance of physiocracy . . . should not be reduced to that of a proto-capitalist harbinger of a pre-ordained nineteenth century capitalist society and bourgeois world view."² In particular, Physiocratic doctrine clearly represents the deepest penetration of bourgeois thinking within what was still a *feudal* social structure, as Fox-Genovese points out. As such, while Physiocracy serves to demonstrate the extent to which productive capital was able to root itself in that mode of production, it delineates as well the limits that existing feudal relations placed on the development of a bourgeois ideology.

The purpose of the present paper is to investigate the social relations portrayed by the Physiocrats, in their own terms, rather than as an erroneous version of Classical political economy, and in the light of recent Marxist scholarship concerning the historical transformation from a feudal to capitalist mode of production. The discussion will take the form of a detailed textual analysis of the central work of Physiocratic theory — the *Tableau Economique* — three editions of which were published by Quesnay between 1758 and 1766. Here we will limit our attention to the final version, the so-called *Formula* of 1766, upon which the "Analysis" of Quesnay is based. It is described by Marx as "incontestably the most brilliant [work] for which political economy had up to then been responsible."³

The weight of the historical evidence suggests that the class of bourgeois that emerged victorious in the English and French Revolutions consisted of capitalist farmers (from the class of yeomen primarily) and small manufacturers (from the ranks of the petty producers) — classes nurtured during the late-feudal period, but which during that period were dominated by an alliance of merchant trading companies, financial trusts, and the absolutist state.⁴ The Physiocrats, in articulating the interests of the rising bourgeoisie, break free from the conception of mercantile wealth, and thereby provide a crucial link to the Classical

2 E. Fox-Genovese, *The Origins of Physiocracy* (Ithaca, 1976), p. 30.

3 Marx, *Theories of Surplus Value*, I (Moscow, 1963), p. 344. Marx's most comprehensive discussions of the *Tableau* are located here (pp. 308–44), and also in F. Engels, *Anti-Duhring* (New York, 1939), Chapter 10 (a chapter written by Marx), pp. 269–74.

4 The major works referred to are: M. Dobb, *Studies in the Development of Capitalism* (New York, 1947); C. Hill, *The Century of Revolution* (New York, 1961); P. Anderson, *Lineages of the Absolutist State* (London, 1974); and the collection of articles containing the "Dobb-Sweezy debate" — *The Transition from Feudalism to Capitalism* (London, 1978).

school. This point, which is stressed by Meek, is well taken.

Physiocratic theory is a radical departure from previous mercantile conceptions, in that it identifies exchange-value — money — with the *production* of use-values.⁵ The three classes depicted by the *Tableau* are 1) the *productive class* characterized as being “employed in work which generates the materials necessary for men’s needs . . .”;⁶ 2) the *class of proprietors*, which “subsists on the revenue or net product of cultivation, which is paid to it annually by the productive class”;⁷ and 3) the *sterile class*: workers who “cannot increase the wealth which the nation annually spends, since [this class] is itself limited by the measure of this wealth.”⁸ Each of the classes is defined in relation to production (i.e., the labor process). Yet at the same time, each of the three classes confronts the others as a (collective) owner of commodities and/or money within the sphere of circulation. Thus, relations of production take the form of commodity relations: relations of value. The implicit linkage between the process of social reproduction and the circulation of commodities is a key contribution made by the Physiocrats to the Classical labor theory of value that arose with Smith and Ricardo.

The explicit problem posed by Quesnay in the *Tableau*, however, is not that of explaining the relations of production in terms of relations of value; this is to say, Quesnay does not examine the question of what constitutes the *substance* of value, as distinct from its form, and in that sense he does not formulate a “theory of value.” Instead, the task of the *Tableau* is to demonstrate the formal possibility of simple reproduction of the net product (and conjointly, of the relations of production) exclusively through the *forms* of value, prices, manifested in the sphere of circulation.

The failure of the Physiocrats to confront the problem of value directly gives rise to a significant gap in the structure of their thought — one on which many writers on the subject have

5 Thus Marx states, “The first point to note in this *Tableau* and the point which must have impressed his [Quesnay’s] contemporaries, is the way in which the money circulation is shown as determined purely by the circulation and production of commodities.” *Theories of Surplus Value*, I, p. 308.

6 F. Quesnay, “Extracts from ‘Men’,” in *The Economics of Physiocracy*, R. Meek, ed. (Cambridge, 1963), p. 95. All quotations by Quesnay will be from this work.

7 *Ibid.*, “The ‘Analysis,’” p. 150.

8 *Ibid.*, “The ‘Dialogue on the Work of Artisans,’” p. 209.

commented.⁹ The labor process which results in use-values appearing as commodities in the sphere of circulation, also is seen to generate exchange-values (prices) realized by owners of those commodities. Exchange-value, once the Physiocratic view of wealth as a net product is adopted, cannot be said to be determined strictly within the sphere of circulation — the Mercantilist position with respect to “profits on alienation”;¹⁰ for it is required that, beyond satisfying empirically given conditions of supply and demand, the prices must be such as to reproduce, through the circulation process, the correct distribution of means of subsistence between the various classes; that is, the distribution necessary to effect the reproduction of the net product.

Thus, the conception of wealth as a product of the labor process which appears in the form of commodities, poses a problem of value for Quesnay that is analytically prior to the determination of the exchange-value of the commodity. However, because he does not investigate the substance of value, Quesnay is unable to extend his conception along this dimension. For the most part, the quantities of money assigned to the various commodities within the *Tableau* serve as fixed units of account, indicating a measure of use-values, but having no ground themselves in value *per se*. Value is effectively conflated with use-value.¹¹

Along similar lines, it is to be noted that the net product, as understood by Quesnay, is not divorced from human need, but, to the contrary, it is a prerequisite of the continuing existence of the relation between producer and proprietor. As a consequence, the quantitative *expansion* of wealth does not follow from the Physiocratic conception of wealth. This again distinguishes Physiocracy from the mercantile conception of wealth, the latter being a stock of money reserves whose only use is the generation of profits on alienation. Due to Quesnay's inadequate treatment of value, however, it is seen that the restriction of the *Tableau* to the case of simple reproduction has a positive basis as well. Exchange-value is considered to be the form of use-value, so that

9 See Marx, *Theories of Surplus-Value*, I, p. 46; I. Rubin, *A History of Economic Thought* (London, 1979), pp. 137–38; C. Napoleoni, *Smith, Ricardo and Marx* (New York, 1975), pp. 12–14; among orthodox economists, see J. Schumpeter, *History of Economic Analysis* (New York, 1954), p. 238, and E. Roll, *History of Economic Thought* (London, 1938), pp. 132–33.

10 See Marx, *Theories of Surplus Value*, I, pp. 41–3.

11 See R. Rosdolsky, *The Making of Marx's Capital* (London, 1977), pp. 457–58.

the labor process is reduced to the concrete process of transforming raw materials. It is not conceived of as a process by which value is expanded, but rather as the mere reproduction of use-values (means of subsistence). For this reason then, to the extent that alterations in the scale of production are considered by Quesnay at all, they are limited to accidental fluctuations in the conditions of supply and demand which resolve themselves into a new equilibrium level at which the system again reproduces itself.¹² These fluctuations, not being intrinsic to the process of reproduction, are abstracted from within the framework of the *Tableau*.

We now turn our attention to the formal articulation of the *Tableau*. The paper is divided into four sections. The first contains a short critique of the interpretation of the *Tableau* as a Leontief input-output model, which is currently popular among orthodox historians of economic thought.¹³ The weaknesses of this interpretation are brought out in relation to a few fundamental premises upon which Quesnay's conception rests, but which appear to be ignored by the proponents of the orthodox view. The second and third sections of the paper are an intensive analysis of the circulatory movements of commodities and money found within the *Tableau*. These sections constitute the heart of the piece, wherein the endeavor is made to substantiate the theses outlined above. Finally, a fourth section briefly touches upon the ideological constraints that prevented the Physiocrats from formulating a Classical theory of political economy, despite their advanced conceptions.

I. The Tableau as a Leontief Input-Output Model

The formal structure of the *Tableau* is presented below as a "Transactions Table" outlining the annual circulation of commodities delineated by Quesnay. The four rows of the table indicate sales made by the three classes individually and in total; the

12 See Quesnay, "Extract from 'Rural Philosophy,'" *op. cit.*, p. 149.

13 This model of the *Tableau* was first introduced by A. Phillips, "The *Tableau Economique* as a Simple Leontief Model," *Quarterly Journal of Economics*, No. 1 (1955), 137-44. It is adopted by J. Spengler, "Mercantilist and Physiocratic Growth Theory," in *Theories of Economic Growth*, Spengler, ed. (Glencoe, 1960), 3-64, and Barna, "Quesnay's *Tableau* in Modern Guise," *Economic Journal*, Sept. (1975), 485-96, as well as being reproduced (uncritically) in one of the leading orthodox textbooks, M. Blaug, *Economic Theory in Retrospect* (Cambridge, 1978), p. 28.

four columns of the table indicate likewise with respect to purchases made. The units are empirically observed monetary flows recorded over the year in the manner of modern National Income Accounting data. Indeed, the particular magnitudes found in the *Tableau* are said by Quesnay to be derived from statistical estimates of expenditures available at that time for the French economy.¹⁴ The *ex post* nature of the magnitudes means that, by definition, total sales for the society as a whole will equal total purchases. This total is seen to be five milliards — “milliard” being the monetary unit of account.

Table I
PURCHASES

SALES	1. Prod.	2. Prop.	3. Ster.	4. Total
1. Prod.	—	1	2	3
2. Prop.	—	—	—	0
3. Ster.	1	1	—	2
4. Total	1	2	2	5

Two features of the *Tableau* must be emphasized at the outset if confusion is to be avoided. Failure to recognize either one or the other has led orthodox historians of economic thought to interpret the *Tableau* as an expression of the concrete labor process of society in the manner of an input-output matrix.

First, the *Tableau* only records movements of commodities *within the sphere of circulation*; that is, where goods are exchanged for an established quantity of money. The implication of this is that the concrete labor process is not at all what the measurements found in the *Tableau* refer to, although it is the case that the three different classes reflect particular social relations of production.¹⁵ The three classes are erroneously reduced, in

¹⁴ Quesnay, “Extract from ‘Rural Philosophy,’” *op. cit.*, pp. 148–49.

¹⁵ Unfortunately, the model was lent some credence in this respect by Meek in his “Problems of the *Tableau Economique*, in *The Economics of Physiocracy*, p. 295. However,

the orthodox accounts, to equivalent "productive industries," as Phillips terms them in the original article of this type.¹⁶ Thus the class of proprietors is said to be a "producer of rental services" equal to two milliards. No textual support for the attribution of such a notion to Quesnay is provided in the pieces advancing such a viewpoint, and none as far as I am aware is to be found in Quesnay's works. Indeed, it is obvious on the face of it that the classes of proprietors and sterile workers are not considered by Quesnay to be "productive" in the sense that those he designates as "producers" are. Concerning the class of proprietors, for example, Quesnay states, "their revenue exempts them from labor; *they produce nothing*. (my emphasis);¹⁷ and elsewhere, "agricultural work . . . pays for the manual labor employed in cultivation, . . . and in addition, produces the revenue of landed property."¹⁸ Other statements of this sort are not difficult to find.

The reference to the *Tableau* as the articulation of a social division between three "industries" distorts the clear intent of Physiocratic doctrine by grafting onto Quesnay's conception a "factor payment" theory of distribution that historically did not come into prominence until some fifty years after the Physiocrats' demise — with the post-Revolutionary writings of Say and others.¹⁹ That the class of proprietors makes only purchases during the year is indicated in Table I by the fact that row 2 is

Barna greatly over-states the matter in claiming that Meek himself subscribes to a "slightly modified" version of this model, "on the basis of his very thorough study of Quesnay's system." Barna, *op. cit.*, p. 485. What Meek writes is, "Quesnay would certainly have raised his eyebrows at this model, which effectively conceals the difference between the surplus-producing capacity of the productive class and that of the sterile class, and obliges us to assume that the proprietors produce 'rental services,' in return for their revenue; but there is no doubt that the model does provide an effective way of explaining the actual mechanism of the *Tableau* to economists who are unfamiliar with Physiocratic ways of thought." Faint praise indeed.

16 Phillips, *op. cit.*, p. 141.

17 Quesnay, "Extracts from 'Taxation'," *op. cit.*, p. 104.

18 *Ibid.*, "Extract from 'Corn,'" p. 72.

19 Ironically, one can still read a lucid critique of Quesnay written in 1851 by an adherent of Say, Francesco Ferrara, who objects to Physiocratic doctrine expressly because it *failed* to formulate a coherent factor theory of distribution. "The mistake," Ferrara writes, "always stems from the same idea of rent to which Quesnay assigned an independent existence and the faculty of being a net product. . . . But the illusion vanishes at once if we put rent in its proper place. If it is no more than a claim to a share in the product founded on the necessity to recompensate the service of land in production, rent is an expense like any other and is reimbursed out of the product

composed exclusively of zero elements, thereby formally expressing the tenet that the class of proprietors does not realize any money in the sale of commodities ("services" or otherwise).

The second feature of the *Tableau* to be stressed is that it records a series of circulatory movements between the three classes, each one of which is treated as an entity. The commodity circulation (or alternative mode of distribution) within each class is not considered. It is this, in part, that allows an ambiguity to exist with regard to the relation within the productive class between the sub-class of "husbandmen" (sometimes called "farmers" or "cultivators") and the agricultural workers in their own right. The implication of this second feature is that there is no necessity for a sum of money corresponding to purchases of instruments of labor by sterile workers to be recorded by the *Tableau*, nor is any such sum required to represent purchases of means of subsistence by producers. Both of these kinds of purchases are mirrored by sales of the same amount of money accruing to members of the same class, and hence do not involve the circulation of commodities between classes. This is conveyed formally by the diagonal elements of Table I being composed exclusively of zero elements.

The interpretation of the *Tableau* by orthodox economists is misplaced with respect to the second feature as well. According to that interpretation, the productive class (Industry I) purchases two milliards of means of subsistence for its own use. In the words of Phillips, "Farmers purchase the two retained milliards of their own goods."²⁰ A peculiarity of the formulation given in Phillips' paper, inasmuch as it does claim to offer an input-output model, is that sterile workers (Industry III) are not said to use up instruments of production in production, nor for that matter are proprietors (Industry II) said to need rental services. The other diagonal elements are therefore presumed to be zero.²¹ The elementary question of why the purchase of "two

like any other. After payment of rent, then, agriculture leaves no residue, as no other labor does after its product has paid the claims of all those who have contributed to the value." "Preface on the Doctrine of the Physiocrats," reprinted in *International Economic Papers*, No. 8 (1958), p. 33.

20 Phillips, *op. cit.*, p. 141.

21 Spengler asserts that the sterile class "purchases" one milliard of instruments of labor for its own use, *op. cit.*, 57. However, as noted by Herlitz, "The *Tableau Economique* and the Doctrine of Sterility," *Scandinavian Economic History Review*, No. 1 (1961), 10,

retained milliards" should be the same as two milliards realized in sales by producers as a class, is not addressed.

The Leontief model is shown in the table below.²²

Table II
PURCHASING INDUSTRY

PROD. IND.	1. Ind. I	2. Ind. II	3. Ind. III	4. Total
1. Ind. I	2	1	2	5
2. Ind. II	2	—	—	2
3. Ind. III	1	1	—	2
4. Total	5	2	2	9

It is readily observed that by adding rental services of two milliards as the source of the proprietors' income (row 2, column 1), and two' milliards of sales (and purchases) by producers (row 1, column 1), the model yields a total of nine milliards of total sales — four more than the magnitude cited repeatedly by Quesnay in the "Analysis." "Let us assume, then," Quesnay writes, "a large kingdom whose territory . . . yields every year a reproduction to the value of five milliards";²³ and again, "The total of five milliards, which is divided at the beginning of the process . . . is annually spent in a regular order which perpetually assures the same annual reproduction."²⁴ Nowhere to my knowledge does Quesnay refer to an annual quantity of sales equal to nine milliards, as the orthodox model suggests.

Beyond this, another discrepancy between Quesnay's explicit

note 14, Spengler does not include this in his formal presentation, which is merely a duplicate of Phillips'. If one were to incorporate Spengler's suggestion, the Leontief model would show one milliard in row 3, column 3 of Table II (below), and hence would indicate three milliards of both total sales and purchases by the sterile class, and a total production over the year of ten milliards, rather than nine.

22 The Table shown here is virtually identical to that found in Phillips' article, *op. cit.*, p. 141.

23 Quesnay, "The 'Analysis'," *op. cit.*, p. 151.

24 *Ibid.*, p. 156.

rendering of the *Tableau* and the orthodox model is also apparent. Quesnay declares on numerous occasions in the "Analysis" that the producers make sales of three milliards during the period, and purchases of one milliard — magnitudes that are recorded in Table I (row 1, column 4, and row 4, column 1, respectively). Contradicting this, Table II records five milliards of sales on the part of Industry I and five milliards of purchases. Once more, no justification is given for the attribution of such magnitudes to Quesnay's actual work in the presentations of this interpretation, and little textual support for them is to be found in the literature.

The nature of the scholarship involved in exercises of the sort carried out by Phillips *et al.* is highly doubtful. We have argued here, quite simply, that insofar as they claim to offer an interpretation of Quesnay's thought, these writers provide no evidence to support their thesis that Quesnay's conception is akin to an input-output model. If, on the other hand, the intention is to posit that the *Tableau* is an input-output model *a priori*, without claiming that that interpretation has historical validity, then it is uncertain exactly what contribution to knowledge is made. We know from it neither more about the *Tableau Economique*, nor about the Leontief work. While it is true that, as Phillips concludes, "Quesnay's *Tableau Economique* may be viewed as a static, closed Leontief system,"²⁵ the question remains, is it correct to do so? And that question is not addressed.

II. Circulatory Movements Reproducing the Three Classes

We now turn to an examination of the circulatory movements articulated by Table I. Analytically, the process of reproduction described begins with the payment of money — two milliards — by the class of producers to proprietors in the form of rent. As Marx stresses in *Theories of Surplus Value*,²⁶ this initial movement is not an act of commodity circulation, but rather, one in which money functions in the first instance as a means of payment, with no commodities changing hands. At the outset of the "Analysis" Quesnay writes, "Of . . . three milliards received by the productive class for three milliards worth of products

²⁵ Phillips, *op. cit.*, p. 144.

²⁶ Marx, *Theories of Surplus Value* I, pp. 309–10.

which it has sold, it *owes* [my emphasis] two milliards to the proprietors for the current year's revenue."²⁷ The effect of this payment is to establish the proprietors as a distinct class, defined by its sovereignty over a certain quantity of wealth measured as a quantity of exchange-value paid to it at the beginning of the year. In this way the relation between producers and proprietors is understood to be a precondition of the circulation of commodities, and is not determined itself by commodity circulation.

It is not the case either — as may be supposed — that the payment of rent represents the completion of a previously contracted loan agreement; that is, that goods have already been received by producers drawn on bills of exchange of two milliards due at the beginning of the year. In this sense, the two milliards functions as means of payment, in which act the social relation between producers and proprietors is established, but which lies outside of relations of value. That this is so is proven not only by the fact that no such loan is referred to by Quesnay, but more conclusively, the *Tableau* itself, as we shall see, traces the return of the stock of two milliards initially paid as rent, back to the producers over the course of the period, so that the latter are able to meet their rent payments in the next year, doing so through a series of commodity exchanges in which money functions in each movement as the medium of circulation; no debts are incurred as a consequence, and no new money is created. It may be added that this is consistent with Quesnay's presumption throughout that there is a commodity money (gold or silver bullion) not produced domestically. The existing stock of bullion can be increased only through foreign trade, which is abstracted from within the movements of the *Tableau*.²⁸

The reproduction process, then, as formally articulated by the *Tableau*, contains the reproduction of rent as the manifestation of sovereignty. The payment of rent, by delineating the proprietors as a separate class, grounds the relation between the producers and proprietors that is found in the sphere of circulation. In light of Quesnay's conflation of value and use-value, however, it also follows that the initial quantity of the rent owed,

27 Quesnay, "The 'Analysis'," *op. cit.*, p. 152.

28 *Ibid.*, p. 165. Quesnay writes, "Money does not give itself away for nothing, . . . it costs as much as it is worth to the man who buys it. It is trade which supplies it to those nations which do not possess gold or silver mines."

in monetary units, is arbitrary, having no social determination by a substance of value. Exchange-value (price) being, according to Quesnay, the measure of use-value, the two milliards of rent, as such, is not wealth, but is an empty form until such time as the goods which it commands in the sphere of circulation are specified.

The nature of the contradiction contained in Physiocratic doctrine with regard to value is no better exemplified than by the understanding of sovereignty reflected here. On the one hand, the proprietor is identified by his claim to wealth prior to any commodity circulation — a claim manifested by the annual receipt of rent. On the other hand, sovereignty, as embodied by the same rent, is not to be found in the form of use-values. Instead, it takes the form of exchange-value — money — which can be realized only through commodity circulation with the classes of producers and of sterile workers, both of which generate commodities independently through a labor process.

For Quesnay, then, the goods commanded by the proprietors in the sphere of circulation constitute the substance of the two milliards of money initially received as rent. Such goods are posited to be a quantity of means of subsistence sufficient to reproduce the proprietors over the period, and a quantity of luxury goods, worked up by members of the sterile class and consumed by the proprietors. Each of these is purchased by the proprietors for one milliard, being sold by the producers and sterile workers respectively (see column 2., Table I). The two transactions are obviously predicated upon the existence of not only the proprietors, but of the producers and sterile workers as well, before any circulation of commodities. These classes are engaged over the period in a labor process that results in a heterogeneous collection of goods to be exchanged. It is also true that the labor process itself requires an additional quantity of means of subsistence and instruments of labor to be generated if simple reproduction is to obtain. Equilibrating the exchange-value held as rent by the proprietors is seen to be the labor of the producers and the sterile workers. The latter classes, therefore, appear as the *subjects* of the labor process, and are implicitly counterposed to the proprietors on that basis.

Quesnay comes close to drawing this distinction in the "Analysis" in his comment:

The expenditure involved in simple consumption is expenditure which is itself destroyed without any return. It can be maintained only through the productive class, *which in this respect can provide for itself* [my emphasis]. Thus the expenditure, when it is not employed in reproduction, ought to be regarded as sterile expenditure. . . . The greater part of the expenditure of the proprietors is at least sterile expenditures; we can except only that which is undertaken for the maintenance and improvement of their property and for the expansion of its cultivation.²⁹

The class of producers, and by extension the sterile workers, are "owners" of the commodities each class exchanges, solely through a prior participation in the labor process, whereas the proprietors merely engage in "simple consumption."

It would seem to follow that the *Tableau* links the exchange-values posited — one milliard of means of subsistence, and one milliard of luxury goods — to the labor process out of which the commodities that appear in circulation emerge. The money owed to the proprietor, accordingly, would be said to attain value insofar as it was capable of exchanging with *products of labor*. Unfortunately, while it offers an important insight into Classical value theory, where such a linkage is explicitly made, Physiocratic doctrine is more noteworthy for the absence of any reasoning of this sort. (It should be remarked that Turgot is somewhat of an exception in this regard.³⁰) Rather than explicitly treating producers and sterile workers alike as subjects of the labor process, Quesnay sharply differentiates the roles played by each of these classes in the process of reproduction. In particular, the producers alone are said to expend labor in the production of *wealth*. Hence the significance attached in the "Analysis" to each of the two transactions conducted by the proprietors with their rent is quite different.

One milliard of money, if the class of proprietors is to be materially reproduced, must command a requisite quantity of means of subsistence from the producers within the sphere of circulation. The exchange of this money mediates between the circulation of wealth from its producers to its proprietors; it is not simply an exchange between proprietors of diverse use-

29 *Ibid.*, p. 159.

30 See Marx, *Theories of Surplus Value* I, pp. 54–60.

values. Preceding the act of exchange is presumed to be a labor process which has generated enough means of subsistence to support the class of producers themselves, as well as the proprietors to whom they pay rent. Thus, as Marx remarks, "... no reproduction takes place when the money flows back from the landlord (proprietor) to the farmer (producer). ... First the farmer gives the landlord the money instead of the commodity itself. The money serves the farmer as means of payment to the landlord; it serves the landlord as a means of purchase in relation to the farmer."³¹

It is evident that the means of subsistence consumed directly by the producers during the year are not recorded in the *Tableau*, since these goods do not circulate between classes. Confusion frequently arises concerning this point however, due in part to the fact that Quesnay does calculate a monetary measure of the means of subsistence consumed by producers. Taking the population of the producers as empirically given to be twice that of the proprietors, Quesnay posits that if one milliard is needed to reproduce the latter class, then two milliards of means of subsistence is needed to reproduce the former. What is to be stressed is that the two milliards function here purely as a unit of account, not being actually required in circulation within the formal structure of the *Tableau*.

Quesnay fosters much of the confusion in this regard by referring to these two milliards as "expenditures" on at least two occasions in the "Analysis," conveying the superficial impression that the circulation of that quantity of *money* is said to occur. He writes, "The annual *expenditures of the productive class* is three milliards, made up of *two milliards of products which it retains for its own consumption*,³² and *one milliard of goods which it has purchased from the sterile class*"³³ (my emphasis). I interpret this to mean that the only expenditure of money for goods by the producers is the one milliard that circulates between the producers and sterile workers (see column 1, Table I).

A careful reading of the passage verifies that Quesnay stipulates *one milliard of purchases* on the part of producers, while the other "expenditures" of two milliards never appear in the form

31 *Ibid.*, p. 311.

32 This would seem to be the source of Phillips' tortuous phrase cited earlier (note 20).

33 Quesnay, "The 'Analysis'," *op. cit.*, p. 154.

of money, but instead constitute a measure of use-values directly consumed. It is clear that the formal structure of the *Tableau* does not need to contain a magnitude of two milliards when the latter functions solely as a unit of account, whereas the one milliard which circulates instruments of labor between producers and sterile workers must be contained.

Elsewhere in the "Analysis" Quesnay writes, along similar lines:

We have seen that the returns of three milliards accruing to the productive class include one milliard for the interest on the original and annual advances of this class, which is continually employed in keeping these advances in good repair. Thus only about *two milliards remain with this class for the expenditure of its own immediate agents*, whose number is consequently about double that of the agents of the sterile class³⁴ [my emphasis].

This passage refers to the concrete conditions of the labor process taken in isolation from circulation. The total of three milliards is a measure of the goods used up in the production of wealth (i.e., in the agricultural labor process). One milliard measures the instruments of labor depreciated in the labor process over the period; two milliards measure the means of subsistence needed to reproduce the class of producers. Here, following what was said in respect to the first passage cited, the measurement of one milliard is also equivalent to an amount of money required by the class of producers during the period for the purchase of instruments of labor. Assuming simple reproduction, this amount is equal to depreciation charges (including maintenance costs as well), or what Quesnay usually terms "interest." Since, as we have indicated, value and use-value are conflated by Quesnay, the implication that the same one milliard functions simultaneously as an empirically given quantity of exchange-value and as a measure of use-values realized outside the sphere of circulation, amounts to no more than a tautology. On the other hand, the remaining two milliards which measure the means of subsistence consumed by producers do not function simultaneously as an empirically given quantity of exchange-value. Quesnay's use of the word "expenditure" in this instance is not very different from what it was in the first passage

34 *Ibid.*, p. 161.

cited. Quesnay should not be read to mean that two milliards of money, beyond the one milliard of purchases from sterile workers, is required by the class of producers. According to Quesnay, the two milliards which constitute "the expenditure of its own immediate agents" serve only as a measure of goods consumed directly during the year by the class of producers.

The result is that those means of subsistence that are commanded by one milliard from the class of producers are generated by the labor process specifically as commodities; that is, from the standpoint of the producers, these are values, not goods needed for use during the period. (The producers are, paradoxically, commodity owners, but not owners of wealth.) Crucial to the distinction made by Quesnay between the class of producers and the sterile workers is that the producers alone are understood to lead an autonomous existence, being the only direct consumers of means of subsistence; an existence which at times is extended to underlie the whole complex of exchange relations depicted in the *Tableau*. Thus Quesnay declares, "If anything were taken away from [the] distribution of expenditure to the detriment of agriculture, or if anything were taken away from the returns of the cultivator by any exactions or impediments to trade, a decline in the annual reproduction of the nation's wealth and a reduction in the population would be bound to follow."³⁵

In relation to value theory the foregoing raises the question: in the event that not enough means of subsistence were produced to sustain both the class of producers and the proprietors over the year, what would the one milliard of exchange-value paid from the proprietors' rent represent? In other words, would the use-values commanded by that amount of money within the sphere of circulation remain the same, so that the population of producers would have to decline? Or alternatively, would it be the population of proprietors that declines, with the use-values commanded by one milliard becoming less?

It should not be surprising that Quesnay does not confront this question, for to do so would be to investigate the substance of value as something other than use-value. By the same token, the problem which is posed is not entirely foreign to the discussion in the "Analysis." It is treated, interestingly enough how-

35 *Ibid.*

ever, not in relation to the means of subsistence, but instead with reference to the luxury goods commanded by the other one milliard of the proprietors' rent.

At one point Quesnay characterizes the magnitudes contained in the *Tableau* as those that apply "in the state of prosperity of a kingdom whose territory was fully cultivated by the best possible methods, where trade was as free and unobstructed as possible, and where consequently the revenue of the proprietors could not be further increased." Having stated this general qualification, Quesnay is led to briefly consider the possibility that the state of prosperity is, in fact, not achieved. "But if the territory were not completely cultivated and improved," he continues, "*the proprietors ought to economize on their expenditure with the sterile class* [my emphasis]. Until they reach this point [the state of prosperity] their superfluous expenditures with the sterile class would be luxury expenditures, detrimental to their opulence and to the nation's prosperity."³⁶

The implication is that through the redistribution of the rent expended by proprietors away from luxury goods and towards means of subsistence (and conjointly, the decline in the exchange-value of the first relative to the second), an increase in the proportion of producers to sterile workers can be induced without any corresponding decrease in the population of proprietors being made necessary. The happy consequence would be an increase in the per capita wealth of the proprietors coupled with an increase in the total wealth of the nation. The state of prosperity is understood to mark the limit of the movement described, whereupon, presumably, the increase in the population of producers ceases to increase the net product.

The distinctive nature of the sterile workers (who, for the moment, we consider only in their role as luxury goods workers) is brought out here, in opposition to the other two classes. While the producers are the immediate consumers of means of subsistence, and the proprietors possess a claim to means of subsistence upon which the process of commodity circulation is founded, the class of sterile workers is wholly dependent on commodity circulation for the means of subsistence distributed to it. The luxury goods which appear as commodities in the

³⁶ *Ibid.*, p. 160.

sphere of circulation must command exchange-value, enabling the purchase of means of subsistence from producers in sufficient quantity to support the population of sterile workers during the year.

As posited by the *Tableau*, the one milliard paid to sterile workers by proprietors circulates in turn between sterile workers and producers, the former purchasing means of subsistence from the latter. At one point Marx dubs this "perfect circulation,"³⁷ meaning that, by contrast to the one milliard paid to producers from the proprietors' rent ("imperfect circulation"), the one milliard paid to sterile workers is not just a form by which wealth is circulated — rather, this money mediates the reproduction process itself.³⁸

It is the means of subsistence circulating from producers to sterile workers which alone constitute the remainder of the wealth said to accrue to the proprietors during the year — in addition, that is, to the means of subsistence directly purchased by proprietors from producers. In other words, the net product consists of a quantity of means of subsistence which, it follows, comes to two milliards altogether, measured in monetary units: one milliard consumed by proprietors and one by sterile workers.

The luxury goods purchased by proprietors are revealed to be a form taken by the wealth of the proprietors, the substance of which, so to speak, is the means of subsistence consumed by the sterile workers. The sterile worker is akin to the "free-hand," a popular figure in late-Mercantilist literature, whose existence is tied to the surplus stock of wealth exchanged by sovereigns for superfluities.

It is also the case, however, that the same relation between proprietor and sterile worker which in one sense points to the past, poses the central problem of value that was to occupy Classical political economy for the next century. Within the *Tab-*

37 Engels, *Anti-Duhring*, Chapter 10, pp. 273–74.

38 Marx writes, "This transformation of the one milliard into means of subsistence expresses in the case of L (i.e., the proprietor) mere consumption, but in the case of S (the sterile worker) it expresses industrial consumption, reproduction. . . . The one metamorphosis of the commodity, its retransformation from money into commodity, thus in this case expresses at the same time the beginning of its real, not merely formal metamorphosis — the beginning of its reproduction." *Theories of Surplus Value*, I, p. 329. Cf. the statement of Marx's cited in note 31 above.

leau the sterile worker is the commodity producer *par excellence*. The simple circulation of commodities ($C - M ; M - C'$), wherein luxury goods are sold for one milliard and that money is then used to purchase means of subsistence, is simultaneously the process by which the sterile workers' commodities are reproduced. Thus the sterile workers, more than the class of producers, are akin to the "simple commodity producers" for whom it is true as well that the reproduction of the class is simultaneously the reproduction of its commodities.

The problem posed is clearly that the one milliard of exchange-value is the embodiment of *value*, although the nature of value is not specified. The one milliard *must* represent a homogeneous quantity through which the use-values demanded by proprietors (C) can be understood to be of a magnitude (M) equal to the means of subsistence required by workers (C'). The heterogeneity of the use-values is apparent, but equally so is the necessity for there to be a substance uniting them if the process of reproduction is to be determinate. In this way, the Physiocrats depart from the conception of mercantile wealth by locating the source of the commodity outside the sphere of circulation. Rather than being treated as a given stock, goods that appear in circulation are identified as products. Wealth then, insofar as it is embodied by the commodity, lies not in the completed good, but in the process by which it comes into being.

III. *Circulatory Movements Reproducing the Concrete Labor Process*

The transactions described thus far do not exhaust the movements within the *Tableau*. The reproduction of the concrete conditions of the labor process — the instruments of agricultural labor and the raw materials worked up by sterile workers — requires another set of transactions involving, on the one hand, the exchange of commodities between the producers and sterile workers, and, implicitly on the other, the exchange of *capital* between proprietors and producers. According to the *Tableau*, the sterile workers generate not only a quantity of luxury goods during the year, but a quantity of instruments of agricultural labor as well. These are sold to the class of producers for one milliard. Simple reproduction being assumed, the one milliard is interpreted as the measurement of depreciation of an existing

stock of agricultural instruments. The latter is said to be a "fund of wealth" measured as ten milliards, so that the rate of depreciation is ten percent, or, in other words, the stock of agricultural instruments turns over every ten years.³⁹

Quesnay's use of the phrase "fund of wealth," like his use of the term "expenditures" alluded to earlier, is somewhat ambiguous. In the same passage where the phrase is introduced Quesnay defines what he calls the "returns to the productive class" as both the means of subsistence directly consumed by producers during the year and the instruments of labor which are used up in the agricultural labor process. Total returns are three milliards, therefore, and are identical to the "expenditures" of the producers (but *not* identical to the total purchases of that class). Only the two milliards consumed directly, however, is said to constitute the "annual advances" as well as the returns.⁴⁰ The implication is that the instruments of agricultural labor are purchased at the end of the year so as to renew the concrete conditions of the labor process in the next year. This can be understood to mean that of the money available to be paid as rent (after the second set of transactions is completed), one milliard is retained by the husbandmen, and is used to purchase new instruments of labor.

Concerning the stock of instruments which is depreciated during the year, Quesnay writes:

The fund of wealth employed in cultivation *which constitutes the original advances* [my emphasis] is subject from day to day to a wearing-away which demands continual repairs, absolutely necessary if this important fund is to remain intact and not to move progressively towards complete annihilation. . . . If the cultivators [husbandmen] did not have any fund in reserve, it would follow that after accidents they would be unable to pay the proprietors and the sovereign or unable to meet the expenses of their cultivation in the following year.⁴¹

It is apparent from these remarks that the fund does not have to take the form of money — and, as such, it does not appear

39 See Quesnay, "The 'Analysis'," *op. cit.*, p. 155.

40 *Ibid.*, p. 154. "These three milliards form what are called the returns of the productive class, two milliards of which constitute the annual advances which are consumed for the labor directly involved in the reproduction . . . which this class causes to be annually regenerated. . . . The other one milliard is taken by this same class out of the proceeds of its sales of the interest on the advances of its enterprises."

41 *Ibid.*, pp. 154–55.

within the sphere of circulation. The reference to the "expenses" of cultivation is seen to parallel the use of the term "expenditures" discussed earlier.

We find, then, that the purchase of instruments of labor by the husbandmen is complemented by another, subterranean movement of *capital* from the class of proprietors, who forego immediate use-values amounting to one milliard of money which is used by the class of producers to purchase fixed capital. The producers, of course, employ the stock of instruments in the labor process, furnishing the requisite productivity (use-values generated per worker) upon which are predicated both the annual advances, the two milliards of means of subsistence consumed by producers, and the net product as well. "The total amount of this interest is spent annually," Quesnay writes, "because cultivators never allow it to remain inactive. . . . That is why interest is included in the total annual expenditure."⁴² The stock of instruments is a fund of *wealth*, therefore, insofar as it serves the class of proprietors through the production of the net product; yet the annual expenses associated with that stock (maintenance and depreciation charges) are attributed in the formal structure of the *Tableau* to the class of producers (see row 3, column 1 of Table I).

In contrast to Mercantilist analysis, in which capital initially takes the form of a stock of idle money reserves, and in which the circulation of capital is confined to the sphere of commodity circulation, Quesnay considers capital initially in the form of a stock of instruments of labor; that is, as one element of productive capital. He does not include the other element, labor-power, explicitly as capital. By considering productive capital, Quesnay links the circulation of capital to the labor process, a significant advance in terms of the investigation of capitalist relations beyond the analysis of capital by the Mercantilists.

In particular, the *Tableau* relies upon a conception of the circuit of commodity capital to describe its movements in the three classes. Following Marx's exposition in *Capital*, Vol. II, that circuit is expressed as follows:⁴³

⁴² *Ibid.*, p. 156.

⁴³ See Marx, *Capital*, Vol. II (New York 1967), pp. 86-99. This is a slightly modified version of Marx's formulation, p. 95.

$$C' - M' \left\{ \begin{matrix} M - C(MP) \dots P \dots C' \\ m \end{matrix} \right.$$

A quantity of means of subsistence (C') appears as commodities within the sphere of circulation, and is purchased for two milliards (M'), capable of supporting both the proprietors and luxury goods workers. Out of the sum of two milliards, one milliard (M) is used to purchase new instruments of labor — means of production: $C(MP)$. These also appear as commodities. They provide the concrete conditions in which the labor process (P) reproduces the initial quantity of means of subsistence (C').

Intrinsic to the above is that capital is not conceived of as the expansion of exchange-value *per se*, in the manner of Mercantilist thought. Instead, it entails the consumption of use-values (instruments of labor and means of subsistence). That the first is measured to be one milliard, while the second, two milliards, is an unimportant formality. It is meaningless, after all, to say there are “more” means of subsistence at the end of the labor process than there were instruments of labor prior to it.⁴⁴ Similarly, as opposed to the other circuits of capital analyzed by Marx, the commodity capital does not expand from the beginning to the end of the circuit.⁴⁵

Not being grounded in a theory of value, and hence unable to identify the homogeneity of commodities, Physiocratic doctrine conflates the production of value with the production of wealth. The instruments of labor purchased from sterile workers

44 This should serve to repudiate the interpretation of the *Tableau* put forward by Eatwell that Quesnay's conception is that of the “Ricardian corn model.” He writes, “No theory of value was necessary in the Physiocratic model, since all outputs and all inputs in the only sector of the economy presumed to yield a surplus, agriculture, may be considered homogeneous.” Eatwell, “Controversies in the Theory of Surplus-Value: Old and New,” *Science & Society*, No. 3 (1974), 288. To the contrary, the agricultural labor process depicted by Quesnay involves the use of non-agricultural goods — instruments of labor — in the creation of means of subsistence, instruments that are generated for that purpose. Further, as we shall touch upon in the third section of the present essay, if it is true that the “inputs” into agricultural production are not homogeneous, as Eatwell would have it, it is equally true that the “outputs” are not homogeneous either. For in addition to means of subsistence (food), industrial raw materials are also considered by Quesnay to be agricultural products. What Eatwell seems unaware of is that the *Tableau* is articulated in monetary units, not in terms of a numeraire good such as corn, as is the case in portions of Smith's work, and in the early works of Ricardo (who did try to solve the problem of value initially in the manner described by Eatwell).

45 See Marx, *Capital*, Vol. II, pp. 92–3.

are employed in the production of the annual advances, which in turn are used to maintain the labor-power required to produce the net product. The net return to the husbandmen from the annual advance is zero, since this sub-class of producers purchases instruments of labor solely in order to establish the conditions of reproducing the same advances in the next year. The husbandman, unlike the merchant depicted by Mercantilists, is not grounded, in the last instance, in the expansion of exchange-value through the circulation of capital, but acts to reproduce, from one year to the next, a fixed quantity of use-values. Quesnay's conception of capital, in this respect, is less advanced than that of the Mercantilists — the relative backwardness being no better verified than by the virtual absence of the question of profit from the "Analysis," as compared to its increasing prominence in late-Mercantilist works, culminating in the writings of Steuart.

The tendency within Physiocratic doctrine, then, is to reduce the husbandman to no more than a special sort of agricultural worker, one who manages the fund of wealth on behalf of the proprietors. In this way the proprietor tends to be transformed from the sole sovereign of the net product into the proprietor of the *social capital*.

Quesnay's thought moves furthest in this direction when he states, "As the proprietors are by natural law intrusted with the care of the administration of their patrimony, and with the expenses involved in keeping it in repair, they cannot be confused with . . . the purely sterile class."⁴⁶ This passage is exceptional, but nonetheless it does point to an important train of Physiocratic thought. In it the role of the husbandman is all but eliminated. The annual advances appear as means of subsistence foregone by the proprietors during the period; that is, "advanced" to attain labor power needed to produce the net product. It must be stressed that such a transaction between the proprietors and the class of producers is nowhere to be found explicitly within the formal structure of the *Tableau*, however. Indeed, no indication is given by Quesnay that labor-power, as such, appears as a commodity.

Along these same lines, the original advances are equated

46 Quesnay, "The 'Analysis'," *op. cit.*, p. 160.

with the stock of uncultivated land (the "patrimony" of the proprietors), which itself is sanctioned by "natural law." Here, the *Tableau* most indicates the influence of Cantillon on Quesnay's conception.⁴⁷ The land is maintained through the exchange of instruments of labor from sterile workers to producers, the payment of one milliard being conceived of as the foregone rent of the proprietors. Thus, the fund of wealth does not depreciate, while the "productivity of the land" is characterized as the source of the net product: wealth. Any notion of capital as the expansion of *value* is, in this framework, largely suppressed.

From the circuit of commodity capital it can be seen that the exchange of instruments of labor from the sterile workers to the producers for one milliard does not complete the movements within the *Tableau*. On the one hand, the instruments of labor — C(MP) — which are exchanged, are presupposed by the circuit.⁴⁸ On the other hand, the sum of money (m) equal to one milliard is all the exchange-value at the disposal of the producers. The latter have insufficient rent to pay the proprietors, to whom it is owed, and for the proprietors to purchase the net product (C') in the next period at its existing exchange-value (M') of two milliards.

Quesnay achieves what is at least a formal solution to both of these problems by positing a final transaction which completes the third, and last, set of transactions within the *Tableau*. Sterile workers are said to purchase with the one milliard received for the agricultural instruments of labor, raw materials from the class of producers. The class of producers thereby become possessed of two milliards (for rent), while the class of sterile workers acquire enough materials for them to work up into luxury goods and instruments of labor in the next year. An effect of this final transaction that may be noted is that included in the quantity of use-values generated by the agricultural producers during the year, in addition to the four milliards of means of subsistence, is a fifth milliard of raw materials sold to sterile workers. The total agricultural product is thus five milliards, and as

47 The influence of Cantillon on Physiocratic thought is treated extensively in Herlitz, "Trends in the Development of Physiocratic Doctrine," *Scandinavian Economic History Review*, No. 2 (1961), 107–51. Also see Meek, "Problems of the *Tableau Economique*," *op. cit.* pp. 267–69.

48 See Marx, *Capital*, Vol. II, p. 95.

Quesnay comments, "According to this hypothesis, the annual advances reproduce 250 per cent."⁴⁹

Some confusion can arise as to the timing of the exchange of raw materials from producers to sterile workers. Quesnay, in one of the few statements he makes in this context, writes, "The raw material and labor used in making the goods of the sterile class bring the sales of this class out at two milliards, of which one milliard is spent for the subsistence of the agents who make up this class." As stated, this conforms exactly to the presentation of the *Tableau* offered here. However, Quesnay then goes on to write, "The other one milliard is reserved for the replacement of its [the sterile class's] advances which, in the *following year* [my emphasis], will be employed anew in purchasing from the productive class the raw materials for the goods which the sterile class makes."⁵⁰

The apparent meaning is that the purchase of raw materials occurs in the beginning of the year, not the end, with the "advances" of the sterile class being one milliard held in money at the end of the year rather than as a stock of raw materials. This formulation, which is found in but one passage in the "Analysis," is inconsistent with Quesnay's oft-repeated assertion that the payment of rent to proprietors is the presupposition of the reproduction process depicted by the *Tableau*; as is seen from the circuit of commodity capital shown above, the purchase of means of subsistence, by proprietors from producers is analytically prior to the purchase of raw materials by sterile workers. Thus, for instance, in outlining the *Tableau* at the outset of the "Analysis," Quesnay describes the circulatory movements over the year as follows: "the productive class sells one milliard's worth to the sterile class which buys from it the raw materials necessary for its goods."⁵¹ The purchase of raw materials is explicitly derived from the revenue (rent receipts) of the proprietors, and not the reverse. Also the final transaction *within the year* is this purchase by sterile workers.

The reason for Quesnay's inconsistency here is perhaps not difficult to ascertain. Once one posits the circuit of capital as a whole, then the last set of transactions in a temporal sense does

49 Quesnay, "The 'Analysis'," *op. cit.*, p. 153.

50 *Ibid.*, p. 152.

51 *Ibid.*

immediately precede the first set described. From the standpoint of the class of sterile workers, therefore, the reproduction process seems to be initiated by the advance of one milliard in the form of the purchase of raw materials. The latter serve as circulating capital, being the materiel that is worked up into luxury goods and instruments of labor, and hence they furnish the concrete condition of the means of production which appear in the circuit of commodity capital. Quesnay's contradictory treatment of the timing of the exchange of these raw materials derives from a confusion between the circuit of the social capital — represented by the agricultural commodity — and the individual circuit associated with the class of sterile workers which is presupposed by the first.

The magnitude of one milliard attached to the raw materials is, in fact, the quantity of money needed by producers to meet their rental obligations in the next year. Conjointly, the raw materials purchased by sterile workers must be of an amount sufficient to yield the requisite quantity of instruments of agricultural labor in the next year (given the labor-power available from sterile workers for that purpose). A linkage between these two magnitudes is not forged in the "Analysis." Of some note is the fact that no sub-class of sterile workers analogous to the husbandmen is ever suggested by Quesnay — a class which might be identified with the circulation of capital by sterile workers. The Physiocratic conception of capital cannot extend much beyond the fundamental notion of the net product, the specific form of which is agricultural goods.

The purchase of raw materials formally completes Quesnay's solution to the problem of simple reproduction by reconstituting the conditions that existed at the beginning of the year. The distribution of the means of subsistence is accomplished in the reconstitution of the population of the three classes in a given proportion. (As Meek observes, per capita consumption of the proprietors, measured in exchange-value, is twice that of each of the other two classes.⁵²) The conditions of the distribution carried out in the prior transactions are established by the reproduction of the concrete labor process.

Notice that the formal results of the *Tableau* lend weight to

52 Meek, "Problems of the *Tableau Economique*," *op. cit.*, p. 277.

the fundamental Physiocratic tenet that the class of producers generates a net revenue of two milliards (understood to be a measure of the net product) by making sales of three milliards, but purchases of only one milliard, whereas the class of sterile workers simply generates, through the sale of commodities, the two milliards which it withdraws in the consumption of raw materials and means of subsistence. A last point to be made is that insofar as the class of proprietors only makes purchases during the year, the reconstitution of its population is the only condition of the distribution of means of subsistence to that class. Thus, with regard to the formal structure of the *Tableau*, the proprietors are not involved in the last set of transactions at all.

While it formally completes Quesnay's solution to the problem of simple reproduction, however, the purchase of raw materials by sterile workers from the class of producers also reveals certain difficulties within the structure of the *Tableau* which remain unresolved. In this light, it is of interest that Quesnay devotes very little attention to the last transaction, eschewing any elaboration of it in the several "Comments" of which much of the "Analysis" consists.

Concerning the establishment of the conditions necessary for the appearance of instruments of agricultural labor in the circuit of commodity capital, we find that some portion of the means of subsistence initially purchased by luxury goods workers must be further distributed to workers engaged in the generation of agricultural instruments of labor if the requisite labor-power is to be available to work up the raw materials acquired. The means by which this distribution is effected is not suggested. The social division of labor inside the sterile class tends to break down the central division affirmed by the Physiocrats — that between producers and sterile workers.

Thus, while the necessity of the first division is implied by the structure of the *Tableau*, it nonetheless remains unmediated within that structure. The reader is reminded that neither the instruments of labor employed by sterile workers nor the raw materials worked up by producers appear within the formal structure of the *Tableau*, since, like the means of subsistence consumed by producers, these do not involve commodity exchanges between classes. Unlike the means of subsistence consumed by producers, however, the "means of production of the sterile

workers" (a contradictory phrase) are not investigated at all in the "Analysis"; hence no measurement of them in monetary units is articulated, nor is any monetary measure given for the raw materials worked up by producers.

The other significant difficulty revealed by the final transaction has to do with the basic Physiocratic identification of "production" with the generation of particular use-values — "agricultural goods" characterized in the first instance, as "means of subsistence." The conflation of the natural form (let us say, corn) with the function (food), no other object being considered to fulfill that function, may be taken as an assumption about nature adopted for the sake of simplicity of exposition. What must be made clear is that the Physiocratic conception of wealth as the net product of agricultural goods — upon which is predicated the idea that one class of workers is "productive" — refers to the functional aspect of agricultural goods. The conception is applied, regardless of its concrete manifestation, to any "thing" (subject) necessary to human existence which must be produced with human labor (e.g., to wheat as much as corn).

In the same way as the inclusion of a sub-class of workers who sell instruments of agricultural labor tends to disjoin the various functional aspects of agricultural goods (since such instruments are required to support the existing population but do not function as food), so, too, raw materials assumed to take the form of agricultural goods (livestock, for example), but not functioning as food, disjoins the natural from the functional aspects of the use-value. While such raw materials take the natural form of an agricultural good, they nonetheless do not serve the function of food any more than do the instruments of agricultural labor, although both of these are still necessary for the support of a given population. Therefore the inclusion of raw materials in the total product of the class of producers also tends to dissolve the division between producers of *wealth* — conceived of as means of subsistence — and sterile workers, who produce instruments of labor, but not wealth.

IV. A Note on Physiocratic Ideology

Having concluded the main body of our discussion of the *Tableau*, it is appropriate to address a few remarks to the ques-

tion of Physiocratic ideology. The Physiocrats' discovery with respect to the transitional period is clearly the circuit of commodity capital, elaborated, as we have seen, in the *Tableau*. All use-values being commodities, it follows that the simple reproduction of the social relations and the circulation of commodities are inextricably linked. Consequently the problems of Classical political economy, particularly the problem of value, are refracted throughout the formal structure of the *Tableau*. By the same token, it must be stressed that we have also seen that the Physiocrats do not treat the form which the labor process actually takes in capitalist society. Notably, labor-power, unlike the instruments of labor, is hidden from the circuit of capital portrayed by Quesnay, the money capital of both the producers and of the sterile workers being confined to the money used to purchase instruments of labor and raw materials.⁵³ The Marxist tenet that labor-power comes to serve as a singular use-value to capital, and that generalized commodity production is grounded in the production of surplus-value, are notions largely absent from Physiocratic thought. In this very important sense, Meek's remark alluded to at the outset, that "Both Quesnay and Smith . . . and the school which they represent were primarily concerned with the scientific analysis of *capitalist production*," can be misleading.

The ideological content of Physiocratic doctrine derives from the contradictory belief that the true subject of the labor process is not the laborer at all, but that it is the "productivity of land" which constitutes the source of wealth. One might say that Quesnay's analysis pivots about this belief, always exerting itself to go beyond it, forward to a conception of capitalist social relations, but never fully succeeding in this task. This is succinctly put by the economist Napoleoni:

The physiocratic schema admits that the entity of the "net product" depends upon . . . the intensity of capital investment in land. If this is the case, however, it is no longer possible to attribute only to land, to its

53 This is succinctly articulated by Grossman: "The monetary system of the Mercantilists merely analysed the circuit of capital within the sphere of circulation in the money-form. The Physiocrats understood the problem at a deeper level: but they regarded the economic process as an eternal circuit of commodities, as the real production of commodities was not seen as the work of human beings but of Nature." "Marx, Classical Political and the Problems of Dynamics," reprinted in *Capital & Class*, No. 2 (1977), p. 45.

original and natural properties, the power of giving rise to a "net product"; and we consequently come to abandon the main reason for limiting the phenomenon of surplus to agriculture alone.⁵⁴

In other words, insofar as instruments of labor appear as commodities purchased as capital, labor, whether expended in producing means of subsistence or instruments of labor, must be necessary to the creation of wealth. The question, viewing Physiocracy as an ideology, is why Quesnay was incapable of making this step, thereby freeing his analysis of productivity from being based solely on the land, and effectively transforming the social division between producers and sterile workers into a division between capitals. A detailed examination of the ideological constraints placed on Physiocracy is beyond the scope of the present paper. However, a brief examination of the Physiocrats' advocacy of a single land-tax will serve to bring out a few points concerning the above question.

Fox-Genovese emphasizes that the ideology of "natural rights" (also flying under the banner of "laissez-faire") provided support for a radical restructuring of property in favor of the emerging bourgeoisie during the seventeenth and eighteenth centuries in France and England.⁵⁵ The Physiocrats adopted such a stance with regard to tax policy, arguing that an increasing state debt, which largely sustained a thriving class of tax-farmers and privileged monopolists, was fettering the development of productive capital, especially in agriculture. While there seems little doubt, therefore, that Physiocratic doctrine endeavored to advance bourgeois interests, the exact nature of those "interests" in the context of a late-feudal society is not always sufficiently considered.

In particular, it is necessary to distinguish between the class of merchants and financiers on the one hand, and on the other, the transitional class of yeomen — middle and upper-peasantry emerging as capitalist farmers. The latter were the representatives of productive capital, in Smith's sense. Concerning the role of the merchants and financiers, Dobb persuasively argues:

It was precisely the lack of development of the market . . . that gave merchant capital its golden opportunity. . . . For this reason also, while

⁵⁴ Napoleoni, *op. cit.*, 22.

⁵⁵ See Fox-Genovese, *op. cit.*, pp. 19-23.

the influence of commerce as a dissolvent of feudal relationships was considerable, merchant capital remained nevertheless in large measure a parasite on the old order, and its conscious role, when it had passed its adolescence, was conservative and not revolutionary.⁵⁶

It was tax relief for the yeomen, who constitute the backbone of the agricultural bourgeoisie, that the Physiocrats advocated. By contrast, they relegated the class of merchants to the sphere of circulation. To the extent that the distinction between the productive and sterile classes is understood to be that between productive and merchant capital, there is justification for Meek's classification of Physiocracy as a species of Classicism.

Along these lines, Quesnay articulates in the "Analysis" the same "liberal" critique of Mercantilism soon to be taken up by Smith. He writes, "The merchants never cause prices or the possibility of trade to come into being: it is the possibility of trade and the inter-communication of prices which causes merchants to come into being"; and to make sure that the ideological resonance of this is not lost on the reader, Quesnay adds in a footnote, "It is the same with [the merchants] as with a well-rope and the use to which it is put. These do not constitute the source of the water which is in the well: on the contrary, it is the water which is in the well which is the cause of the use the rope is put to. *Enlightened men* [my emphasis] do not confuse causes with means."⁵⁷

The peculiarity of the Physiocrats' liberalism (by comparison to Smith's) becomes apparent, however, when one considers the argument concerning the single land-tax. In this context, productivity is attributed to the land itself in accordance with the well-known Physiocratic doctrine, to wit: "the origin, the principle of all expenditures and all wealth is the fertility of the land."⁵⁸ The attribution of "sterility" (the negation of productivity) is applied to industrial (non-agricultural) production. What Smith would term productive capital is quite the opposite for Quesnay. Does this mean that the Physiocrats betray their bourgeois identity? The answer is no. As explained by Marx:

The ostensible veneration of landed property becomes transformed into the economic negation of it and the affirmation of capitalist pro-

⁵⁶ Dobb, *op. cit.*, p. 89.

⁵⁷ Quesnay, "The 'Analysis'," *op. cit.*, p. 165, note 1.

⁵⁸ Quesnay, "The 'Dialogue on the Work of Artisans,'" *ibid.*, p. 209.

duction. . . . Since industry as the Physiocrats see it creates nothing, but only transforms values given it by agriculture into another form . . . it is naturally desirable that this process of transformation should proceed without interruption and in the cheapest way; and this is only realized through competition by leaving capitalist production to its own devices.⁵⁹

Physiocratic ideology is seen to rest on the premise that the production of wealth is exclusive of the expenditure of labor; that, in the last instance, wealth is "the spontaneous gifts of nature."⁶⁰ While this serves as a non-revolutionary means for adopting a laissez-faire policy toward productive capital as such (including the husbandman), and retains a certain bourgeois identity for Physiocracy, it also renders the classification of Quesnay as a member of the Classical school, as posited by Meek and others, highly doubtful.

In the case of tax policy, then, it is seen that Physiocratic ideology anchors wealth — the net product — in a *feudal* conception of sovereignty; the proprietor of the land (the ultimate source of wealth) is made responsible for the provision of taxes. Labor is made possible by wealth, and not the reverse. This is in stark contrast to the Classical school, grounded as it is in the labor theory of value. The thrust of Physiocratic ideology, as Fox-Genovese indicates,⁶¹ is to drive a wedge between the ruling landed aristocracy on the one hand, and the mercantile classes on the other. Of course, the historical irreconcilability of such an alliance between aristocracy and the bourgeoisie accounts for the brevity of Physiocracy as an "active" ideology. This is dramatically demonstrated by the futile attempts of Turgot to institute bourgeois reforms as minister of finance in the court of Louis XVI less than ten years before the actual downfall of the *ancien régime*.

V. Concluding Remarks

Our discussion strongly suggests the centrality of the class of proprietors within the *Tableau*. We have observed that it is the payment of rent, owed by producers to proprietors prior to, and

59 Marx, *Theories of Surplus Value*, I, p. 53.

60 Quesnay, "Extract from 'Rural Philosophy,'" *op. cit.*, p. 60.

61 Fox-Genovese, *op. cit.*

independently of, commodity relations, which initiates the reproduction process depicted by the *Tableau*. We have observed, as well, that it is the expenditure of a portion of rent by the class of proprietors to purchase luxury goods which underlies the Physiocratic notion of sterility. It is true that Quesnay's work strives to eliminate the proprietor, in a sense, and to arrive at a conception of purely capitalist relations, but its failure to do so is demonstrated by the virtual absence within the circulatory movements of the *Tableau* of the relation between productive capital and wage labor. Our examination of the *Tableau* indicates that this central work of Physiocratic theory is therefore more properly to be considered an analysis of feudal social relations from a bourgeois point of view than, as Meek would have it, as "the scientific analysis of *capitalist production*."

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